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Noon

1059-25 High Levels of Leisure Time Physical Activity Reduce Subclinical Atherosclerosis in Asymptomatic Women

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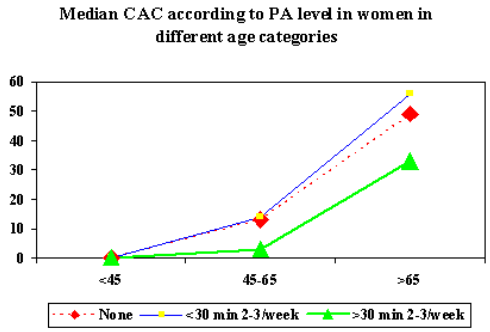
Background: We sought to assess whether increasing levels of self-reported physical activity (PA) confers benefits in reducing subclinical atherosclerosis as determined by coronary artery calcification (CAC) in asymptomatic women.
Methods & Results: We studied 1801 consecutive asymptomatic women (54±10 years) referred to a single-center facility for electron-beam tomography (EBT). Participants were classified into three categories of leisure time PA:none, low (PA<30 min. 2-3/week, n=860) and high (PA≥30 min. 2-3/week, n=941) respectively. Women with increasing levels of PA had a lower prevalence of hypertension, diabetes, smoking and obesity (P values <0.005-0.0001). In younger women (<45 years) no difference was observed in the CAC score according to increasing intensity of PA (figure). However in women >45 years of age involved in high PA had significantly lower median scores compared to individuals with no and low levels of PA, respectively. After adjusting for conventional risk factors including body mass index, high levels of PA were associated with 33% lower prevalence of CAC (p<0.0001) as well as 43% reduction in age based ≥75th percentile CAC (p<0.0001) in women aged 45-64 years; in elderly women (≥65 years), high PA resulted in 49% lower prevalence of CAC (p=0.0006) and showed a trend towards lower ≥75th percentile CAC (p=0.06).
Conclusions: Extensive public health benefits may be achieved by encouraging asymptomatic women for vigorous PA in light of clear relationships seen in this study.



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1059-26 Cardiopulmonary Function Is Abnormal After Statin-Induced Rhabdomyolysis and Myositis

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Background: The withdrawal of cerivastatin has increased interest in the cause of statin-induced rhabdomyolysis and myositis (MYO). Biopsy evidence in MYO patients suggests a defect in fat oxidation which may be measured by the respiratory exchange ratio (RER).
Methods: MYO patients had muscle symptoms and creatine kinase > 400 in association with statin therapy. Cardiopulmonary exercise tests (CPX) were performed fasting, off statins and the results were compared to normals. The Orca® CPX system was calibrated to a known gas mixture before each test. The protocol consisted of 30 minutes of rest followed by 8 minutes of ramped exercise. Peak oxygen consumption (VO2 max), anaerobic threshold (AT), ventilatory efficiency (VE / VCO2) and basal RER were recorded.
Results: Nine sequential patients were studied 2 - 60 months post MYO (See Table below). Indices of aerobic function were depressed compared to aged adjusted standards. Basal RER (0.92±.07) was elevated compared to 6 normals measured in our lab (0.76±0.03), suggesting a defect in fat oxidation (*p=0.0002). Finally, the ventilatory efficiency was decreased in most MYO patients.
Conclusions: Post-MYO patients exhibit decreased aerobic capacity and ventilatory efficiency suggesting a persistent abnormality in cardiopulmonary function. The fasting, basal RER is significantly increased in MYO patients indicating a previously unidentified abnormality in fatty acid oxidation.

N	Creatine Kinase IU/L	Basal RER (Normal= 0.76±0.03)	VO2 max ml/min/kg	AT ml/min/kg	Δ VE / Δ VCO2 (Normal= 26±4)
9	18713± 35176	0.92 ± 0.07*	19 ± 9.7	13 ± 5	30 ± 6

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1059-27 The American Heart Association Get With the Guidelines Coronary Artery Disease Program Improves Care for Patients of All Ages

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Background: Studies demonstrate that older patients receive effective cardiovascular preventive interventions less frequently than younger patients. We hypothesized that the American Heart Association (AHA) Get with the Guidelines Coronary Artery Disease Program (GWTG-CAD) could effectively improve care for patients of all ages.
Methods: GWTG-CAD is a comprehensive, hospital-based quality improvement program. Hospital teams use an internet-based data collection, reporting and decision support tool presenting AHA/ACC guidelines with collaborative learning sessions, teleconference and Internet support, to improve acute and secondary prevention care in eligible hospitalized CAD patients. We compared age-related adherence to 5 GWTGs secondary prevention interventions between baseline and Q5-Q7 in patients from 160 hospitals.
Results:

	54 and under	55 - 64	65 - 74	75 and older	P for age difference

	N	Rate	N	Rate	N	Rate	N	Rate	
Smoking cessation counseling									
Baseline (B)	324	68.2 %	233	63.9 %	142	54.9 %	69	39.1 %	**
Q5 and over	320	85.9 %	222	87.4 %	119	75.6 %	72	66.7 %	**
Delta (Q5-B) ±SE	17.7±3.24 %**		23.5±3.85 %**		20.7±5.74 %**		27.6±8.09 %**		
Beta blocker at D/C									
Baseline (B)	545	89.9 %	542	90.8 %	550	87.8 %	698	82.4 %	**
Q5 and over	569	95.4 %	551	97.6 %	568	95.1 %	870	95.3 %	NS
Delta (Q5-B)±SE	5.52±1.56 %**		6.87±1.40 %**		7.25±1.66 %**		12.9±1.61 %**		
ASA at D/C									
Baseline (B)	553	98.0 %	563	97.0 %	580	96.6 %	713	94.7 %	**
Q5 and over	580	99.1 %	563	99.3 %	581	99.0 %	849	97.2 %	**
Delta (Q5-B)±SE	1.13±0.71 %NS		2.31±0.80 %**		2.42±0.87 %**		2.50±1.0% *		
AMI-ACE at D/C									
Baseline (B)	577	61.7 %	590	66.1 %	604	58.4 %	775	53.8 %	**
Q5 and over	591	64.8 %	586	60.8 %	613	57.9 %	947	54.4 %	**
Delta (Q5-B)±SE	3.11±2.82 %NS		-5.35±2.89 %NS		-0.53±2.83 %NS		0.58±2.41 %NS		